

WINTER  
2002

# Lake Times

J. Strom Thurmond Project, Savannah District, U.S. Army Corps of Engineers



Aerated turbine allows air to be mixed with water during generation, creating bubbles shown in photo.

photo by Annette Carter

## Corps' first aerated turbine installed at Thurmond Power Plant

by **Bryan C. Vann, power plant electrician**

Rep. Charlie Norwood met with Savannah District Engineer Col. Roger Gerber and other military and environmental agency representatives on March 25 to welcome the arrival of the first of seven new aerated turbines slated for the Thurmond Power Plant. The second turbine is due to arrive next March and by 2006 all seven should be installed.

The aerated turbine is a newly patented design of Voith-Siemens Hydro and is the first turbine of this type to be used at a Corps facility. Its unique design allows air to be mixed with water during generation, thereby

increasing dissolved oxygen levels downstream to provide better habitat for aquatic wildlife.

With the new turbine at the center of attention, no one questioned the fate of the original equipment, which had served its purpose very well for the last 50 years. No one except Thurmond Power Project Manager Phinzy Davis, that is. Davis, a 30-year veteran in the field of hydropower, knows how seldom the opportunity to see a turbine outside of its natural element occurs. Having observed one on display in York, Pa., several years ago, he decided to put the old turbine (now

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# Keep an eye out for birds displaying signs of AVM

by **Allen Dean, Chief Ranger**

Scientists, natural resource management personnel, biologists, and researchers are looking for birds infected with Avian Vacuolar Myelinopathy (AVM) on Thurmond Lake. This disease, with no known cause or cure, is responsible for the death of more than 25 bald eagles on the lake since 1999. Other birds in this area, including the American coot, Canada goose, Great horned owl, and Killdeer have also been tested and found to have died as a result of the disease.

AVM appears to have a cycle that runs from October through April and then seems to disappear. The disease was first diagnosed in 1995 on DeGray Lake in Arkansas but did not reappear the following year. Since then, AMV cases have been confirmed on at least nine lakes in the Southeast. Many eyes are watching the wildlife on Thurmond Lake and other southeastern lakes this fall to see if the disease reappears during 2002-2003.

South Carolina Department of Natural Resources and Clemson University are conducting studies on toxins produced by certain species of algae. Other ongoing

research is being conducted by the Southeastern Cooperative Wildlife Disease Study Group (SCWDS), part of the College of Veterinary Medicine at the University of Georgia. Last year SCWDS proved that the disease could be transmitted to red-tailed hawks that eat infected American coot tissue. Therefore, it is safe to assume that the eagles contract the disease from eating infected coots. To date, however, how the coots become infected is still unknown.

Visitors to the lake are asked to keep an eye out for any birds displaying clinical signs of the disease. Signs include erratic flight, inability to fly or perch, or in the case of coots, swimming in circles and/or floating upside down. If you see any affected birds, please contact your state Department of Natural Resources or the Corps at the Thurmond Lake Office, 1-800-533-3478.

## ***Southern Pine Beetle Update***

This past summer Southern Pine Beetles (SPB) wreaked havoc on pine forests throughout the Southeast. Unfortunately, lands around Thurmond Lake were not spared. These small insects have killed more than 2,000 acres of pine trees, and the effects of the infestation can be seen easily in several subdivisions adjacent to the lake and in several major recreation areas, including Lake Springs, Amity, Cherokee, and Bussey Point. Many of these areas have been heavily impacted by SPB suppression efforts. However, failure to take action would have resulted in a much more devastating loss of timber.

One bright spot is that much of the infested timber was salvaged and turned into lumber or paper. Some of the funds received from the sale of the timber will be used to reforest the affected areas, repair trails and forest roads, and complete maintenance projects in parks around the lake.

The Natural Resources Management staff at Thurmond Lake would like to thank all those who have been involved in our SPB suppression and salvage efforts, including adjoining property owners, loggers, and lake visitors. Your cooperation, patience, and understanding are very much appreciated.

If you have any questions, please contact Chief Ranger Allen Dean or Project Forester David Malone at 1-800-533-3478.

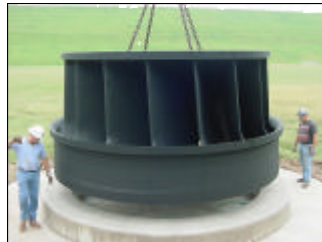
## **Aerated turbine installed at power plant**

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cleaned and painted) outside the plant for everyone to see. For nearly 50 years the turbine converted the energy of clean falling water into affordable electricity for homes and businesses in the Southeast.

The old turbine weighs 59 tons and produced more than 55,000 horsepower when operated at peak efficiency. Impressive as it may sound, this figure is shaded in comparison to the 72,000 horsepower output of the new 39-ton aerated turbine. But what cannot be overshadowed is the fact that the original equipment was designed in an era far less technically advanced and it more than doubled its estimated lifespan.

To see the turbine, follow the directional sign from SC Highway 221 for the Thurmond Power Plant, about one mile from Clarks Hill, SC. The display is on the right.



**Old turbine is on display**



Local Cub Scouts from Pack # 643 build one of 15 fish attractors. The Columbia County EMA volunteered their boats and operators to place the fish attractors in the lake.



photos by Jill Davis



Girls Scouts from Savannah River Troop #285 take a well-deserved break from shoreline trash cleanup. These were two of 46 volunteers who worked on Sept. 28 to improve public lands. The largest single group of volunteers— 18 from S.O.R.B.A. (a cyclist group) cleared 91 trees from trails. After the work, everyone was treated to lunch donated by local businesses.

**Sept 28**

## ***National Public Lands Day at Thurmond Lake***



Members of the Augusta Canoe and Kayak Club bring in the first of many loads of trash collected from muddy shorelines. They were assisted by the Augusta Dive Club. A total of 250 pounds of trash was hauled away.



## **Fishing pier improved**

A big project to improve the Below Dam South Carolina tailrace fishing pier was completed in September. Continually exposed to wet conditions, the wood planking on the pier was deteriorating and needed to be replaced. The pier was also fitted with recycled plastic benches (placed for full accessibility) and adapted railings for use by visitors in wheelchairs.

photo by Annette Carter

# History uncovered at lake

by Zach Harkness, Park Ranger

The waters of Thurmond Lake are well known for many things— great fishing, boating, swimming and many other opportunities for outdoor recreation. Not as well known is the history hidden beneath the surface. Before the Savannah River was dammed, creating what is now Thurmond Lake, a whole different world existed along the banks of the Savannah River. Evidence of this can now be seen at the site of what was once one of the largest cities in Georgia, Old Petersburg. Dionysius Oliver, a native Virginian, established the town in 1784. By 1790, Petersburg was one of the largest towns in Georgia, third behind Savannah and Augusta. The town was built at the junction of the Broad and Savannah rivers, where Bobby Brown State Park is now located. With lake levels down due to the ongoing drought conditions, remnants of buildings and house foundations can be seen along the lake's shoreline. So the next time you're spending time at the lake, don't just look at the surface; ask yourself, "What lies beneath?"

## Customer Service telephone numbers

These numbers for the J. Strom Thurmond Project  
serve both the lake and power plant offices

1-800-533-3478 or  
864-333-1100

Call either number for daily updates on  
power generation and lake and river levels

*Fax numbers:*

(864) 333-1150 (Lake Office)  
(864) 333-1164 (Power Plant)

1-877-444-6777

National Recreation Reservation Service  
for campground reservations

cut and save

[www.sas.usace.army.mil/drought/](http://www.sas.usace.army.mil/drought/)

## Drought Information



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Operations Project Manager  
J. Strom Thurmond Resource Office  
Route 1, Box 12,  
Clarks Hill, S.C., 29821